

WHAT IS CLAIMED IS:

1. A method of mapping memory in a computer system, said computer system comprising at least one device having a memory and said memory comprising at least one block having a starting address, comprising the steps of:

assigning a device ID to said at least one device in said computer system;  
assigning a block ID to said at least one block of memory; and  
assigning an offset ID to a memory unit stored in said at least one block of memory.

2. A method according to claim 1 wherein said memory unit comprises data.

3. A method according to claim 1 further comprising the step of:

calculating a memory address by adding said starting address of said block of memory to said offset ID.

4. A method of mapping memory in a computer system, said computer system having first and second devices each having a memory and each of said first device memory and said second device memory having at least one block of memory, comprising the steps of:

storing in said first device memory a first virtual address for a first memory unit in said first device memory, wherein said first virtual address comprises: a first device ID identifying said first device, a first block ID identifying said at least one block of memory in said first device memory; and a first offset ID identifying a memory cell in said first block of memory in said first device memory; and

storing in said first device memory a second virtual address for a second memory unit in said second device memory, wherein said second virtual address comprises: a second device ID identifying said second device, a second block ID identifying said at least one block of memory in said second device memory; and a second offset ID identifying a memory cell in said second block of memory in said second device memory.

5. A computing environment comprising:

at least one device having a memory, said memory comprising at least one memory block;

a device ID stored in said memory, said device ID identifying said at least one device;

a block ID stored in said memory, said block ID identifying said at least one memory block; and

an offset ID stored in said memory, said offset ID identifying a data unit stored in said memory.

6. A computing environment according to claim 5, wherein said device ID is configurable.

7. A computing environment according to claim 5 wherein said block ID is configurable.

8. A computing environment according to claim 5, wherein said block ID corresponds to a starting address of said at least one memory block.

9. A computing environment according to claim 5 further comprising a memory block ID lookup table stored in said memory.

10. A computing environment according to claim 5 further comprising a device ID lookup table stored in said memory.

11. A computing environment according to claim 5 wherein said device is a server.

12. A computing environment according to claim 8 wherein the sum of said starting address of said memory block and said offset ID equals a memory cell address.

13. A computing environment according to claim 12 wherein said memory cell address is a physical address.

14. A computing environment according to claim 12 where said memory cell address is a virtual address.

15. A computing environment comprising:

at least one device having a first memory, said first memory comprising at least one memory block;

a device ID stored in a second memory, said device ID identifying said at least one device;

a block ID stored in said second memory, said block ID identifying said at least one memory block in said first memory; and

an offset ID stored in said second memory, said offset ID identifying a data unit stored in said first memory.

16. A computing environment according to claim 15 wherein said device is a first server.

17. A computing environment according to claim 16 wherein said second memory is in a second server.